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10/520,132

12/05/2005

Stefan Wilhelm

LINDE-627

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07/16/2008

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EXAMINER

DOERRLER, WILLIAM CHARLES

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

07/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|--|--|
| Office Action Summary | Application No. 10/520,132 | Applicant(s) WILHELM, STEFAN | |
| | Examiner William C. Doerrler | Art Unit 3744 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5-7-2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstone et al (6,360,545) in view of the '918 British patent from the IDS.

Goldstone et al disclose applicant's basic inventive concept, a rectangular bottomed, metal lined enclosure for a cryogenic separation system, substantially as claimed with the exception of forming the sheet metal lining using sheet metal panels which are held together with a frame of U-shaped members. The '918 British patent show this feature to be old in the metallic enclosures art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of the '918 British patent to modify the enclosure of Goldstone et al by forming the sheet metal lining with common sized panels that are held together with a framework to provide a fluid tight, durable enclosure that can be readily transported and assembled. In regard to claim 5, the size of the panels is seen as a matter of design choice for an ordinary practitioner in

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the art. Applicant's claimed size range is seen to be in the range that would have been obvious to an ordinary practitioner in the art to provide panels that are easily transported and easy to assemble. In regard to claim 8, Official Notice is taken that it is well known in the sheet metal fabrication art to screw pieces together to provide an easily assembled, removable connection. In regard to claim 10, the mounting of components to frameworks is well known in the art to provide a strong foundation for supporting the component. Preassembling a portion of the wall before it is integrated into the sidewall is seen as obvious to one of ordinary skill in the assembly of structures art. Portions of walls are customarily partially assembled and then added to the whole. An example of this is framing a wall and then fastening multiple walls together to frame a building. In regard to claim 12, the thickness of the sheet metal is seen as a matter of obvious design choice for an ordinary practitioner to provide the required protection as economically as possible. In regard to claim 13, figure 4 of the British patent shows legs extending to the outside of the frame. In regard to claim 14, the U shaped frame members of the British patent are seen as equivalent to two L shaped members in regard to providing stiffness.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstone et al in view of the '918 British patent as applied to claims 1-14 above, and further in view of Bardo et al (5,236,625).

Goldstone, as modified, discloses applicant's basic inventive concept, an insulated housing for a cryogenic device with sheet metal panels of a common size, substantially as claimed with the exception of using round diagonal braces. Bardo et al show this

feature to be old in the framework art (see 221 and 223). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Bardo et al to modify the supports of Goldstone et al by using diagonal braces to improve the rigidity of the framework.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstone et al (6,360,545) in view of Scott (2,181,074).

Goldstone et al discloses applicant's basic inventive concept, a coldbox having a rectangular base and a sheet metal lining for a cryogenic separation system, substantially as claimed with the exception of forming the sheet metal lining from modular panels. Scott shows this feature to be old in the insulated liquid containment art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Scott to modify the insulated, lined enclosure of Goldstone et al by using modular sheet metal panels to make the lining easier to construct and self supporting. In regard to claim 5, the size of the panels is seen as a matter of design choice for an ordinary practitioner in the art. Applicant's claimed size range is seen to be in the range that would have been obvious to an ordinary practitioner in the art to provide panels that are easily transported and easy to assemble.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstone et al (6,360,545) in view of Sharma et al (5,548,933).

Goldstone et al discloses applicant's basic inventive concept, a coldbox having a rectangular base and a sheet metal lining for insulating and protecting a cryogenic

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separation system, substantially as claimed with the exception of using a plurality of metal plates to form the liner. Sharma et al show this feature to be old in the tank art in line 38 of column 7. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Sharma et al to modify the insulated, lined enclosure of Goldstone et al by using modular sheet metal panels to make the lining easier to construct and self supporting. In regard to claim 5, the size of the panels is seen as a matter of design choice for an ordinary practitioner in the art. Applicant's claimed size range is seen to be in the range that would have been obvious to an ordinary practitioner in the art to provide panels that are easily transported and easy to assemble.

Claims 1-5, 7-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstone et al (6,360,545) in view of Voegeli et al (4,739,597). Goldstone et al disclose applicant's basic inventive concept, a rectangular bottomed, metal lined enclosure for a cryogenic separation system, substantially as claimed with the exception of forming the sheet metal lining using sheet metal panels which are held together with a frame of U-shaped members. Voegeli et al show this feature to be old in the metallic enclosures art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Voegeli et al to modify the enclosure of Goldstone et al by forming the sheet metal lining with common sized panels that are held together with a framework to provide a fluid tight, durable enclosure that can be readily transported and assembled. In regard to claim 5, the size of the panels is seen as a matter of design choice for an ordinary practitioner in the art.

Applicant's claimed size range is seen to be in the range that would have been obvious to an ordinary practitioner in the art to provide panels that are easily transported and easy to assemble. In regard to claim 10, see the mounting of lamps 123 in the interior of the panels of Voegeli et al. Preassembling a portion of the wall before it is integrated into the sidewall is seen as obvious to one of ordinary skill in the assembly of structures art. Portions of walls are customarily partially assembled and then added to the whole. An example of this is framing a wall and then fastening multiple walls together to frame a building. . In regard to claim 12, the thickness of the sheet metal is seen as a matter of obvious design choice for an ordinary practitioner to provide the required protection as economically as possible.

Response to Arguments

Applicant's arguments filed 5-7-2008 have been fully considered but they are not persuasive. Applicant states that Scott provides heat insulation and thus one would not look to the reference for a cryogenic insulator. However if one were building a cryogenic containment, one would look to known insulation building techniques to provide the most efficient building process for the required insulation housing. As both references are directed to building insulated enclosures, one of ordinary skill in the art would consider the teachings applicable. The same is true of the Sharma and Voegeli et al references. All the reference are directed to forming structures with a sheet metal wall and associated framing. As all the reference are solving similar problems, providing a reliable, economic structure, the references are seen as combinable.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Doerrler whose telephone number is (571) 272-4807. The examiner can normally be reached on Monday-Friday 6:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William C Doerrler
Primary Examiner
Art Unit 3744

WCD

/William C Doerrler/
Primary Examiner, Art Unit 3744